Get Wired: Software Application Lights Up Broadband Fiber Management
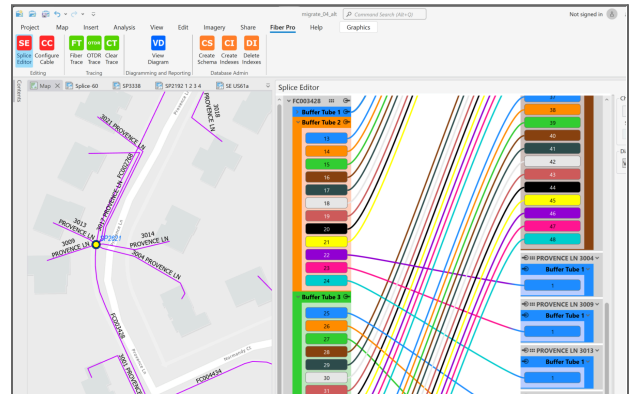
Utilities Sector Software Solution Provider

About the Client

This private company develops innovative GIS software solutions for utilities and institutions planning, constructing, and managing broadband fiber and electric utility systems.

About Eichcorp

Eichcorp is a software consulting and implementation practice based in Charlottesville, Virginia that specializes in custom software implementation, GIS/mapping applications, software project/product management, and cloud solutions. Learn more at www.eichcorp.com

The Challenge

Broadband fiber design engineers required a data-driven, digital solution to design and manage fiber optic networks. Both GIS experts and novices would benefit from a software application built on modern Esri ArcGIS software that could scale from a single-user up to an entire organization. Engineers needed to view and update splicing, extend and maintain existing networks, trace connectivity, and generate diagrams and reports to support downstream workflows.

The Outcome

As the company's Software Development Partner, Eichcorp handled all aspects of the development of a new software application, from design through implementation. This application is an ArcGIS Pro Add-In built using Microsoft .NET/C# and utilizes geodatabase data which can be accessed directly or through ArcGIS Enterprise web feature services. Eichcorp also developed workflows and automated Python scripts to migrate data into the application.

The Solution

ArcGIS Pro
Foundation for fiber network design and management

ArcGIS Pro SDK for Microsoft .NET
Toolkit for for Fiber Pro software development

ArcGIS Enterprise
Provides read/write access to transactional GIS and tabular fiber network data in service oriented system architectures

ArcGIS API for Python
Automate migration of data into Fiber Pro

Microsoft SQL Server
Enterprise data storage

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